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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,691	12/05/2003	Vladimir Leonov	2003P17994US	9985

7590 04/19/2006

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

COMAS, YAHVEH

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5/1

Office Action Summary	Application No. 10/728,691	Applicant(s) LEONOV, VLADIMIR	
	Examiner Yahveh Comas	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22-25 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 22-25 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

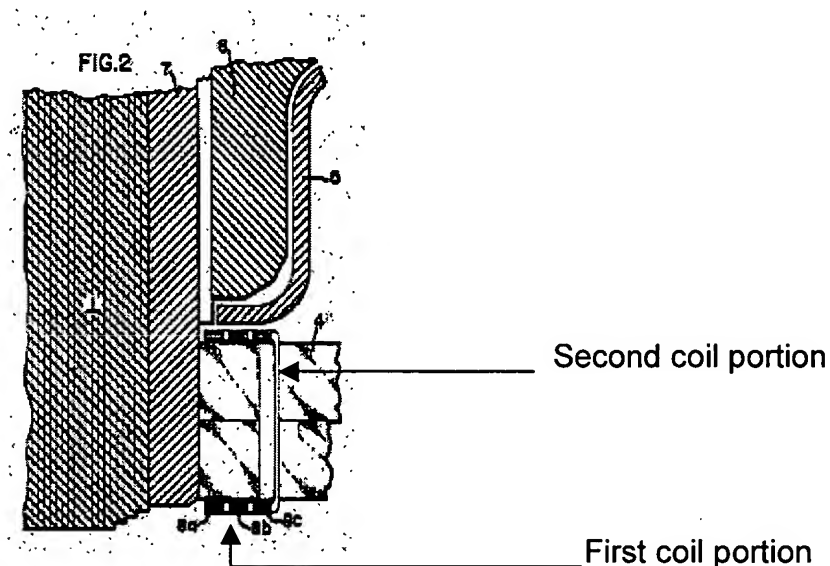
Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12/30/2006 have been fully considered but they are not persuasive.



Arguments regarding Harrington patent failing to disclose a countering magnetic field generator comprising a first electrically conductive coil portion positioned for having electrical current induced therein by the rotor, and a second electrical electrically conductive coil portion positioned adjacent the end of the stator and connected to the first electrically conductive coil portion to receive the electrical current therefrom to generate the countering magnetic field is not persuasive since, as show in fig. 1, Harrington discloses a countering magnetic field comprising a flux shield 5 and a coil 8 in order to reduce the penetration of the stray leakage flux wherein the coil 8 has a first and a second coil portion adjacent to the stator end and having electrical current

induced therein by the rotor. Therefore the rejection of claims 1-20 and 22-28 is sustained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 5, 6, 10-12, 15, 16, 20, 24 and 25 are rejected under 35

U.S.C. 102(b) as being anticipated by Harrington U.S. Patent No. 3,731,127.

Harrington discloses a generator comprising a rotor, a stator (1) surrounding said rotor and having apposing ends, said stator comprising a stator core and a plurality of windings (4) carried by said stator core creating an undesired axial magnetic field component adjacent the opposing end of the stator (1); and at least one counteracting magnetic field generator associated with at least one end of said stator for generating a counteracting magnetic field (8, 5, 13) for counteracting the undesired axial magnetic field component (see fig. 2). The counteracting magnetic field comprises a first electrically conductive coil portion positioned for having an electrical current induced therein by said rotor, and a second electrically conductive coil portion positioned adjacent the at least one end of said stator and connected to the first electrically conductive coil portion to receive the electrical current therefrom to generate the desired phase offset for the counteracting magnetic field.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrington U.S. Patent No. 3,731,127.

Harrington discloses the claimed invention except for the first portion of the counteracting magnetic field generator being in a gap between the stator and the rotor or a recess in the stator.

Harrington disclose the use of counteracting magnetic field generator having a first and second portion which is located at the end of the stator core opposing the stray flux which cause heating and magnetic losses in the stator core and rotor yoke (see column 1, lines 19-23). It would have been an obvious matter of design to provide the first portion of the coil (8) between the gap created at the end of the stator and the rotor, since applicant has not disclosed that the location of the counteracting magnetic field solves any stated problem different from the one stated by Harrington (example heat and magnetic losses) or is for any particular purpose different from the one stated by Harrington (example heat and magnetic losses) and it appears that the invention would perform equally well as long the counteracting magnetic field generator is provided at the end of the stator core .Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide the first portion of the

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counteracting magnetic field generator in a gap between the stator and the rotor since was know in the art that as long the counteracting magnetic field generator is located at the end of the stator core a flux opposing the stray flux is provided as disclosed by Harrington.

3. Claims 4, 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrington U.S. Patent No. 3,731,127 in view of Takagi U.S. Patent No. 5,073,735.

Harrington discloses the claimed invention except for the first portion of the counteracting magnetic field generator in a recess in the stator.

However, Takagi disclose the use of recess (37) in the stator in order to retain a coil. Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide a recess in the stator since that would had been desirable for retain a coil as disclosed by Takagi.

4. Claim 7, 9 17, 19 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrington U.S. Patent No. 3,731,127 in view of Hovnanian et al. U.S. Patent No. 2,846,597.

Harrington, as applied above, discloses the claimed invention except for counteracting magnetic field generator being connected to a power source in order to generate the counteracting magnetic field. However, Hovnanian disclose the use of a coil (26, 28, 126, 128) connected to a power source in order to create a magnetic field opposing the stray flux controlled by varying the current flow in the coils (see column 3, lines 25-42). Therefore it would have been obvious to one having skill in the art at the

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time the invention was made to provide a counteracting magnetic field generator being connected to a power source since that would had been desirable to create a magnetic field opposing the stray flux.

Regarding the power source providing a desired phase offset for counteracting magnetic field It would have been an obvious matter of design choice to provide a power source with an offset, since the applicant has not disclosed that power source offset solves any problem or is for a particular reason rather than the one already stated by Hovnanian which is the creation of a magnetic field opposing the stray flux .

5. Claims 8, 18 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrington U.S. Patent No. 3,731,127 in view of Hovnanian et al. U.S. Patent No. 2,846,597 and in further view of Calfo et al. U.S. Patent No. 4,230,961.

Harrington, as applied above, discloses the claimed invention except for a magnetic sensor. However, Calfo discloses the use of a sensor (20) embedded in the stator core in order to measure the axial flux at the end of the stator core. Therefore it would have been obvious to one having skill in the art at the time the invention was made to provide a magnetic sensor since that would had been desirable to measure the axial flux at the end of the stator core.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

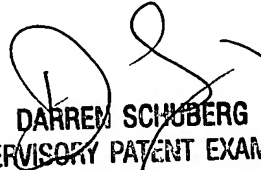
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571)272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YC


DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
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